

Ledge Road Landfill / Deyermund Field Capping, Renovation and Expansion Project

Town of Andover, Massachusetts

Closure of the Ledge Road Landfill is proceeding in accordance with the Massachusetts Department of Environmental Protection (MassDEP) Solid Waste Management Regulations (310 CMR 19.000). The Town's goal is to provide post-closure recreational use on the site, with the expansion of Deyermund Field.

Site Background

The Ledge Road Landfill, a 25.8 acre parcel, is located west of Ledge Road, northeast of the I-93 / I-495 interchange.

The former landfill was closed to waste disposal in 1973. During the 1980s, the Town constructed Deyermund Field on the northern portion of the site, consisting of two ball fields and a soccer field (see Figure 1). The remaining southern portion of the site currently serves as a municipal public works yard for storage of brush, street sweepings, catch basin cleanings and roadway construction debris.

Under the MassDEP landfill closure process as detailed in the Solid Waste Management Regulations, an Initial Site Assessment (ISA) and Comprehensive Site Assessment (CSA) were completed. The CSA concluded that the landfill site had no significant impact on human health, safety or the environment. For this reason, recreational play has been allowed to continue on Deyermund Field, with regular testing to document that the fields remain safe for play.

Phased Capping and Post-Closure Use

The Town has developed a phased closure approach for the site, which will allow continued use of the fields throughout the closure process. Specifically, this approach will maintain the existing fields that are vital to support town recreational programs, while constructing replacement fields on the area currently serving as a public works yard. Figure 2 shows Phase I of the project, for which final design and permitting is proceeding, with construction anticipated to begin in spring 2007.

Figure 1. Existing Site Uses

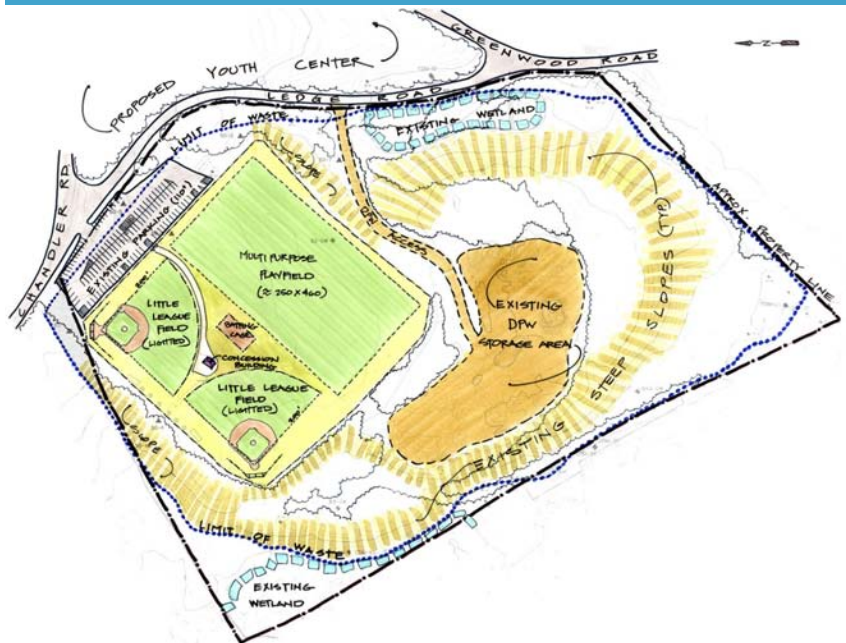


Figure 2. Phase I Implementation



Several field configurations and layout options have been developed for Phase II. Figure 3 shows one such layout option which includes a total of seven fields, parking and relocation of the DPW storage yard to the southern edge of the site. Work will continue with the Fields Group to develop a preferred site configuration that will accommodate the combined DPW and recreational uses.

Preparation of Phase II preliminary design plans and associated permitting efforts are to begin in fall 2006. The Town's goal is to initiate construction of Phase II in the fall of 2008 when the Phase I fields are ready for use. It is the Town's intent to maintain availability of the two little leagues fields throughout the closure process.

Continued

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Assessment of Wetlands Tributary to Fish Brook

The CSA documented the presence of unexpected concentrations of the metal arsenic in wetland sediments immediately adjacent to the southwestern edge of the landfill. In response to MassDEP comments on the CSA and a lowered drinking water standard for arsenic, the Town has undertaken a program to further sample and assess sediment and surface water in the wetland system downstream of the landfill site. This wetland system is within the Fish Brook watershed – a Class A designated surface water that provides a portion of the Town's water supply.

Based on sampling to date, two samples slightly exceeded the new drinking water standard for arsenic at surface water locations within 200 feet of the landfill. Numerous surface water samples collected further downstream have had no detection of arsenic.

Regarding wetland sediment, levels of arsenic that appear to be well in excess of natural concentrations have been detected, requiring further sampling and assessment, as part of a Supplemental CSA. The goals of the Supplemental CSA will be to define the extent of arsenic in the wetland sediment, update the human health risk assessment and if required conduct an ecological risk assessment. The Supplemental CSA will be followed by a Corrective Actions Alternatives Analysis (CAAA). The CAAA will focus on two issues – the necessity and extent of wetland sediment management because of the arsenic concentrations and the need for source identification and feasible control measures to limit future arsenic deposition in the wetland sediment. It is anticipated that all Supplemental CSA and CAAA activities will be completed during 2007.

Figure 3. Conceptual Layout for Post-Closure Use



Public Involvement Plan (PIP)

At the request of area residents, a Public Involvement Plan (PIP) has been prepared for the site. The PIP, prepared in accordance with MassDEP requirements, provides opportunity for public meetings and public comment on project milestone deliverables. A mailing list is maintained by the DPW for any individuals interested in receiving notification of project milestones and meetings. In addition, the Town has established an Information Repository of all project documents for public viewing at the following locations:

Andover Memorial Hall Library
1 Elm Square
Andover, MA 01810
Time: M - Th 9:00 AM – 9:00 PM

Andover Board of Health
26 Bartlett Street
Andover, MA 01810
Time: M – F 8:30 AM – 4:30 PM

Financial Status

The Town appropriated \$2.2 million at the 1999 Annual Town Meeting for Phase I closure and capping of the Ledge Road Landfill. At the 2006 Annual Town Meeting, \$0.5 million was appropriated for Phase II design and related activities including the ongoing assessment of wetland sediments. The total costs for the landfill capping and fields project has been estimated at between \$6 and \$7 million for both Phases I and II combined. Update of these estimates are in process given the significant escalation of site construction costs within Massachusetts over the past seven years.

For More Information

If you would like more information on this project or wish to be added to the PIP mailing list, please contact:

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